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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
RUDOLF RITTER, ET AL. : EXAMINER: CHARLES, DEBRA F.
SERIAL NO: 09/508,422 :
FILED: MARCH 13, 2000 : GROUP ART UNIT: 3628
FOR: BILLING PROCESS AND SYSTEM :
IN A TELECOMMUNICATION
NETWORK

AMENDMENT

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

In response to the Office Action dated December 24, 2003, please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 5 of this paper.

Amendments to the Drawings begin on page 14 of this paper and include an attached replacement sheet.

Remarks/Arguments begin on page 15 of this paper.

IN THE SPECIFICATION

Please insert before the paragraph beginning at page 1, line 2, the following headings:

B1 BACKGROUND OF THE INVENTION

Field of the Invention

Please insert before the paragraph beginning at page 1, line 4, the following heading:

B2 Discussion of the Background

Please insert before the paragraph beginning at page 3, line 1, with the following heading:

B3 BRIEF SUMMARY OF THE INVENTION

Please insert before the paragraph beginning at page 6, line 9, with the following heading:

B4 BRIEF DESCRIPTION OF THE DRAWINGS

Please insert before the paragraph beginning at page 6, line 21, with the following heading:

B5 DETAILED DESCRIPTION OF THE INVENTION

Please replace the paragraph beginning at page 1, line 4, with the following rewritten paragraph:

B6 In the telecommunications field, a distinction is made between the communications provider, the service provider, and the user. The communications provider, in general a network operator, establishes the prerequisite for generating traffic by means of the

34 infrastructure (fixed or mobile). The service provider can be the network operator himself, or ~~or <sic>~~ a customer of this network operator, for example a service provider, for example a bank, which purchases airtime from an operator and sells it to the user as value added service. The user is a customer of a service provider. He uses a telecommunications system, and pays the service provider fees therefor, or he obtains a service (value added service) with a service provider.

Please replace the paragraph beginning at page 2, line 16, with the following rewritten paragraph:

37 More and more frequently, for instance in pre-paid systems, there is a demand for determining the connections and charging them to an account during or at the latest immediately after the connection. These requirements, however, call for the billing system to process in real-time all data determining the price of a connection. For instance, during or shortly after the connection, the billing system has to collect and process all the timing information and geographic data about the connection to be billed for, for example the duration of the connection, the time of day, the location of the calling and the called party, possible discounts, etc. ~~just after the connection <sic>~~. A heavy load is thereby put on the billing system during peak hours and the billing system must be overdimensioned. Furthermore, depending on where the determination of the costs is executed, for instance in an operations center or in a SIM-card in a terminal device, it is sometimes difficult or even impossible to be provided with all the required information at the end of a connection. In mobile radio systems, for example, the CDRs needed for billing a call are not available until about 15 minutes after end of the call.

Please replace the paragraph beginning at page 5, line 26, with the following rewritten paragraph:

88 This method can be used not only between a service provider and the user, but also between a ~~service provider~~ carrier and a user ~~<ie>~~, or between a carrier and an operator, or between an operator and a service provider. In this last case, the service provider is viewed as the customer of the operator, and the client profile is derived from one or more random variable of previous connections of the service provider. The usage fees, which are billed to the service provider, are determined in this case periodically from this client profile.

Please replace the paragraph beginning at page 8, line 21, with the following rewritten paragraph:

89 The dynamic user profile can be stored in a first memory area 101, preferably in a SIM chipcard 10, if the billing method is carried out directly in a terminal device, for instance in a mobile telephone 1. The overall client profile can be stored in a second memory area 102, for instance. The SIM chipcard 10 also includes a memory area 103 configured to store a pre-paid amount of money. After each new connection, the chipcard processor 100 determines the dynamic client profile depending on one or multiple random variables, and determines the usage fee for new connections from the stored dynamic client profile and possibly from the overall client profile.